# CopperLink™ Ethernet Extender

**Model 1214** 



Achieving symmetrical line rates greater than 168 Mbps over single twisted-pair, Cat 5e/6/7 or coaxial cable, Patton's CopperLink™ 1214 Ethernet Extender is the fastest CopperLink™ ever.

#### **Ethernet Extension**

Extend 10/100Base-TX Ethernet well beyond its 328-foot (100-meter) limitation over a single unshielded twisted pair (UTP), Cat 5e/6/7, or even coaxial cable.

#### Operates Over Twisted Pair

Realize fiber-optic speeds without the expense—and hassle—of installing new cables or line-of-site wireless circuits.

#### Plug and Play

Set these units up straight out of the box. No configuration is required. Auto-sensing 10/100 Ethernet ports support full or half duplex operation.

#### Multiple Line Rates Supported

Switch-selectable rate mode options optimize rate and reach for the noise environment, wire gauge/type and length.

#### Transparent LAN Bridging

Bypass network configuration requirements by transparently passing all higher layer protocols—including 802.1Q VLAN frames

# Typical Application: Extending Ethernet over Cat 5+, Coax, or UTP

Combining data flows from up to four network-enabled devices onto a single twisted pair or coax cable, the Model 1214 can deliver IP traffic up to 1.8 miles (3 km) away—well beyond the standard 328-foot (100-meter) Ethernet distance limitation.

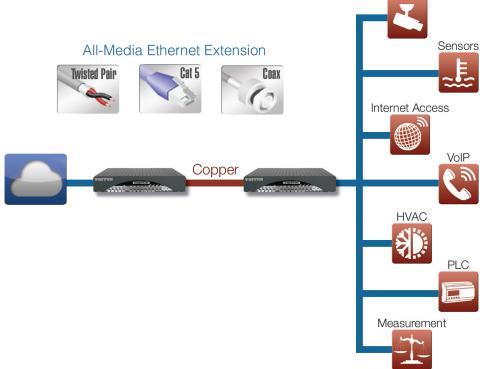
With achievable line rates up to 168 Mbps, the CopperLink 1214 eliminates the bandwidth constraints commonly experienced with other copper-based transmission technologies. The Model 1214 is engineered to re-use existing infrastructure previously employed in legacy applications including alarm cir-

cuits, E1/T1 circuits, RS-232, RS-422, RS-485, CCTV and CATV. Many newer cabling standards are also supported, including Cat 5e, Cat 6 and Cat 7.

A built-in 4-port Ethernet switch makes the CopperLink Model 1214 ideal for delivering multiple IP information streams over a single cable. For example, at a guardhouse or security kiosk, you could aggregate IP data from a laptop, a motion sensor, and two high resolution IP video cameras for simultaneous transmission over a single Ethernet connection.

IP Camera







# CopperLink™ Model 1214 Ethernet Extender



Now Available in Coax (CL1214/BNC)

### Rate and Reach

Long Range Asymmetrical				
Length feet (m/km)	Mbps			
	Downstream	Upstream		
250 (76 m)	67	16		
1,000 (305 m)	59	16		
2,000 (610 m)	45	11		
3,000 (914 m)	31	5		
5,000 (1.5 km)	17	682 kbps		
10,000 (3 km)	4	263 kbps		
	4			

High Speed Asymmetrical				
Length feet (m/km)	Mbps			
feet (m/km)	Downstream	Upstream		
250 (76 m)	168	95		
1,000 (305 m)	126	54		
2,000 (610 m)	60	21		
3,000 (914 m)	42	6		
3,500 (1 km)	35	1		

Long Range Symmetrical				
Length feet (m/km)	Mbps			
feet (m/km)	Downstream	Upstream		
250 (76 m)	68	50		
1,000 (305 m)	62	44		
2,000 (610 m)	50	16		
3,000 (914 m)	33	4		
5,000 (1.5 km)	16	2		
10,000 (3 km)	2.5	1		

High Speed Symmetrical				
Length feet (m/km)	Mbps			
feet (m/km)	Downstream	Upstream		
250 (76 m)	121	144		
1,000 (305 m)	73	103		
2,000 (610 m)	45	37		
3,000 (914 m)	30	10		
3,500 (1 km)	16	4		

### Specifications\*

#### CopperLink Line Interface

- RJ-45 (pin 4 = ring; pin 5 = tip)
- BNC 75 Ω coax
- Terminal block, 2 position

# CopperLink Line Modulation

DMT (Discrete Multi-Tone)

#### Ethernet Interface (x4)

8-position, shielded RJ-45. Auto-sensing 10/100Base-TX with half or full duplex operation.

#### Protocol

Transparent to high layer protocols: supports 802.1Q VLAN tagged or untagged frames.

**Transparent to IP Video schemes**: fully transparent to such compression schemes as MPEG-4, H.264, and MJPEG.

#### Ethernet Interface (x4)

8-position shielded RJ-45. Autosensing 10/100Base-TX with half or full duplex operation.

#### Impulse Noise Protection Modes

Selectable fast and interleave modes

## Target SNR Modes 6 dB and 9 dB

Management

#### Management 8-position DIP switch

#### Monitoring

8 LEDs display Power, Link, Ethernet 1–4, Remote, and Local status.

#### **Power Supply**

External AC: 100-240 VAC

#### Compliance

FCC Part 15A, CE Mark, EMC Directive 89/336/EEC, Low-Voltage Directive 73/23/EEC

#### Environment

**Temperature**: 0 to 50°C **Humidity**: 5 to 95%, non-condensing

Extended Temperature: -40 to

85°C (CL1214E/CC)

**Extended Humidity**: 5 to 85%, condensing (CL1214E/CC)

#### **Dimensions**

6.22L x 4.77W x 1.20H in. (157.99L x 121.16W x 30.48H mm)

### Weight

0.4 lbs (181 g)

### Ordering Info

Obtain ordering info for this product by using the QR code at right or by contacting:

- web: http://www.patton.com/products/ product\_detail.asp?id=501&tab=Ordering
- email: sales@patton.com
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